US Army Corps of Engineers ®
Walla Walla District

McNary Lock & Dam

Powerhouse Capacity: 980 Megawatts
Location: Columbia River, River Mile 292
In-Service Date: December 1953
Normal Operating Pool: 335.0-340.0 feet MSL
Spillway: 1,310 feet, 22 gates
Navigation Lock: This is a single-lift lock, 86 feet wide by 683 feet long and a 75-foot vertical lift.

Authorization: The project was authorized by the River and Harbor Act of 1945.

Progress: Construction of the McNary Project began in May 1947. All power units were in operation in February 1957. No significant investments have been made to improve the efficiency of the generating units since they were installed. USACE and the Bonneville Power Administration are working together to modernize McNary's turbines and related systems to improve power availability and hydraulic capacity while taking advantage of the technology and information that has become available since the installation of the dam to improve turbine passage for fish.

Project: The project includes McNary Dam, Lake Wallula, powerhouse, navigation lock, two fish ladders and a system of levees and pumping plants. The project provides for slackwater navigation, hydroelectric power generation, recreation, wildlife habitat and incidental irrigation.

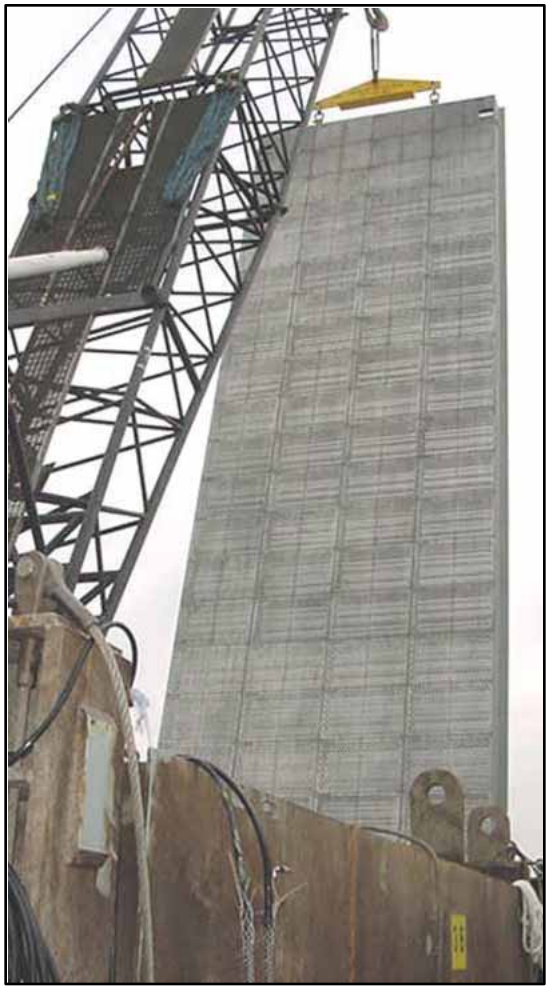
McNary Dam: The dam is 7,365 feet long, rising approximately 183 feet above the streambed. It consists of a concrete structure with an earthfill embankment at the Oregon (south) abutment. The spillway is a concrete, gravity-type spillway dam. It is 1,310 feet long, and contains 22 vertical lift gates, each 50 feet by 51 feet. The crest is at elevation 291feet mean sea level, and is designed to pass a flood of 2,200,000 cubic feet per second.

Reservoir: Lake Wallula lies directly behind McNary Dam. It extends 64 miles upstream to the U.S. Department of Energy's Hanford Site (about 27 miles above Pasco, Washington), on the Columbia River. The lake also extends up the Snake River to Ice Harbor Lock and Dam. Lake Wallula has a water surface area of 38,800 acres, with 242 miles of shore line.

Levees: 16.8 miles of levees surround the cities of Pasco, Kennewick, and Richland, Washington. Drainage and groundwater levels landward of these levees are controlled by 15 pumping plants.

Generators: The powerhouse has fourteen 70,000-kilowatt units– 980 megawatt total powerhouse capacity. One megawatt serves approximately 700 homes. At full capacity, McNary's powerhouse can supply enough power for about 686,000 homes. During fiscal year 2005, 5.31 billion kilowatt hours of electricity were produced.

Fish Passage: There are two fish ladders for migrating salmon and steelhead to use.



Lands: The 16,908 acres of project lands surrounding the lake are utilized for public recreational purposes, wildlife habitat, wildlife mitigation and water-connected industrial development. At the present time, about 2,400 acres are leased either to State or local park agencies. The U.S. Fish and Wildlife Service leases approximately 3,500 acres of project lands as part of the McNary National Wildlife Refuge. Port districts own approximately 1,500 acres within the project boundary for industrial development. Facilities operated by commercial concessionaires or boat clubs are available at eight locations. Public boat launching facilities are available at 17 locations along the shore line. Visitation on Lake Wallula during 2005 was about 4.1 million.

People: More than 120 Walla Walla District employees work at the McNary Project. They serve as electricians, lock operators, mechanics, welders, riggers, painters, utilitymen, heavy equipment operators, park rangers, environmental resource specialists, biologists, administrative staff, engineers and maintenance workers. Together, they ensure the safe and continuous operation of the project.

Budget: During fiscal year 2005, total expenditures were $15.8 million for the McNary Project.

References: Annual Report of the Chief of Engineers on Civil Works Activities, Fiscal Year 2005, Department of the Army Corps of Engineers, Extract Report of the Walla Walla District.

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